Product Overview

Based on the Phoenix Photonics polarization scanner, the controller offers the full PC control of the EPC/PCI combination, but integrated into a single package. Full state of polarization control is achieved by three cascaded variable fiber waveplates. The controller is all-fiber giving return loss, insertion loss and PDL advantages. Control of each individual waveplate describes a complete circle on the Poincaré sphere. The unit allows any SOP to be generated from any arbitrary input SOP. The controller has an internal microprocessor enabling each of the three waveplates can be individually controlled by a computer. The voltage applied to each waveplate, and the type and frequency of modulation can be adjusted. Voltage scanning options are: sine, ramp, square, and random.

Driver software to control up to 4 devices supplied with and easy to use GUI.

Features & Applications

FEATURES:
- Electronic polarization control
- Full PC control
- No hysteresis
- No moving parts
- Simple operation
- Any output SOP achievable
- Low insertion loss
- High return loss
- High extinction ratio
- Maintenance

EXAMPLE APPLICATIONS
- Polarization control
- State of polarization scanning
- Component testing
- Sensor systems
- Optical fiber polarimetry
<table>
<thead>
<tr>
<th>Specification Notes</th>
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<td>1. Losses do not include connectors.</td>
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<td>2. The variation of output power for full coverage of the Poincaré Sphere.</td>
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<td>3. Analogue drive voltage, 0-10V gives 0-2pi differential phase shift for the waveplate.</td>
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<td>4. Scan rate is the rate of polarization change for a cycle of the Poincaré sphere for each section</td>
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**PACKAGING STYLE:**

All dimensions are approximate and may vary slightly, dimensions in mm.

**Ordering Information**

For more information please contact Phoenix sales: sales@phoenix photonics.com or visit us at www.phoenix photonics.com